

#### DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT CORPS OF ENGINEERS
PANAMA CITY REGULATORY OFFICE
1002 WEST 23<sup>rd</sup> STREET, SUITE 350
PANAMA CITY. FLORIDA 32405-3648

Regulatory Division North Permits Branch SAJ-2002-679-RGP-TLZ

June 29, 2007

St. Joe Company Mr. Ken Borick 133 S. WaterSound Parkway WaterSound, FL 32413

Dear Mr. Borick:

Your application for modification to a Department of the Army permit SAJ-2002-679-RGP-DEB was received on 30 March 2007. A review of the information and drawings provided shows the proposed work is for the reduction in scope of the project from a large scale development to a smaller portion of that large development known as Phase 1 of WaterSound North. The project site is located in Sections 13, 14, 22-26, Township 2 South and Range 18 West, Walton County, Florida.

Your project, as depicted on the enclosed drawings, is modified as follows and in accordance with the attached drawings. The project site (known as Phase I) is reduced to 565.62 total acres with 22.94 acres of wetland impacts (22.05 low quality wetlands and 0.89 acre high quality wetlands). Phase I is a part of the larger, previously authorized development plan, which will be submitted in additional Phases at a later date.

The modification is authorized by Regional General Permit (RGP) SAJ-86. This authorization is valid until the expiration date noted for RGP SAJ-86 listed in the table at our website. Please access the U.S. Army Corps of Engineers' Regulatory web address at <a href="http://www.saj.usace.army.mil/permit/permitting/general\_permits.htm">http://www.saj.usace.army.mil/permit/permitting/general\_permits.htm</a> to view the special and general conditions for SAJ-86, which apply specifically to this authorization. To view the referenced conditions click on the permit number and the general condition column in the row corresponding to the SAJ number noted above. You must comply with all of the special and general conditions and any project specific condition of this authorization or you may be subject to enforcement action. The following special condition is included with this authorization:

 Prior to commencement of authorized construction, the permittee agrees to meet the following mitigation requirements as compensation for impacts to 22.94 acres of wetland impacts (22.05 low quality wetlands, 0.89 high quality wetlands) with on-site preservation of 113.81 acres of low quality wetlands and 34.17 acres of high quality wetlands. Mitigation will also include 106.1 acres of total restoration within the Lake Powell Headwaters Conservation Unit, 11.72 acres of preservation within the Wildlife Corridor Conservation Unit and 1.57 credits debited from the Devil's Swamp Mitigation Bank.

Generally, authorization of activities that have commenced or are under contract to commence in reliance of the RGP will remain in effect provided the activity is completed within 12 months of the date the RGP expires or is revoked. In the event you have not completed construction of your project within the specified time limit, a separate application or re-verification will likely be required.

This modification letter does not obviate the necessity to obtain any other Federal, State, or local permits, which may be required.

If you are unable to access the internet or require a hardcopy of any of the conditions, limitations, or expiration date for RGP SAJ-86, please contact Teresa Zar by telephone at 850-763-0717 ext 26.

Thank you for your cooperation with our permit program.

Sincerely,

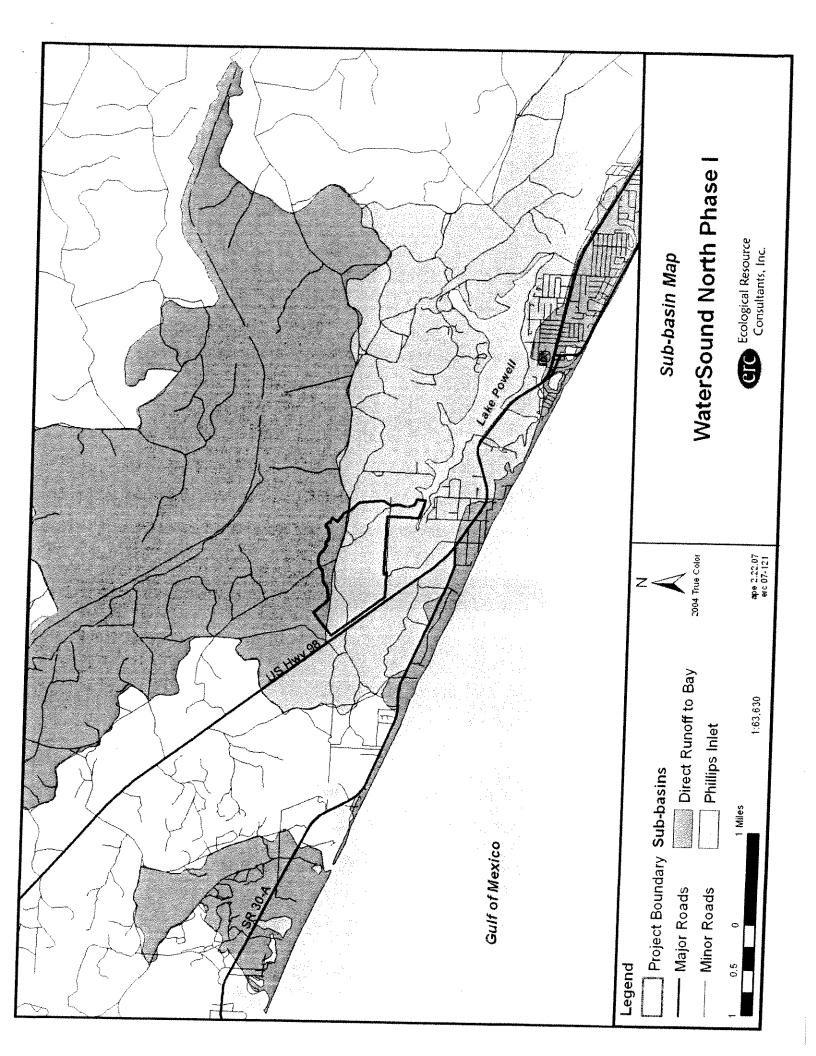
Paul L. Grosskruger Colonel, U.S. Army

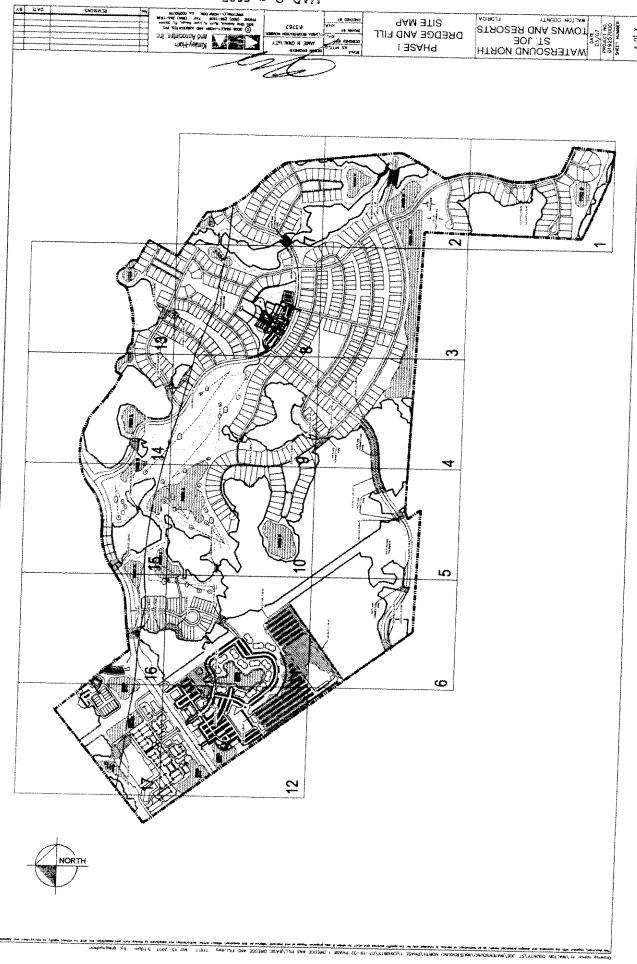
District Engineer

Enclosures

Copies Furnished: ERC, Inc. FDEP, Pensacola

CESAJ-RD-PE

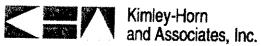




## WETLAND IMPACT SUMMARY WATERSOUND NORTH PHASE I

03/15/07

WETLAND IMPACT	IMPACTS FROM	DEVELOPMENT	IMPACTS FROM	BOARDWALK S
NO.	LOW QUALITY	HIGH QUALITY	LOW QUALITY	T
	AC.	AC.	AC.	HIGH QUALIT
01-01	0.13		Αυ.	AC.
01-02	0.49			
02-01		0.42	·	
02-02				0.11
04-01	0.23			U.11
04-02	1.28			
05-01	0.61			····
05-02	0.23			
05-03	0.05			·
06-01	1.56			
06-02	0.27			
06-03	0.15			
07-01		0.26		
08-02		0.02		
09-02	0.08	0.02		
09-03	0.02			
09-04	0.02			
10-01			0.04	
11-01	0.43		0.04	
11-02	0.23			
11-03	1.47			·····
11-04	7.19			
12-01	0.70			
12-02	4.25			
16-03	0.05			
17-01	0.27			
TOTAL IMPACTS	19.71	0.70		
		0.70	0.04	0.11
WE	TLAND IMPACT SUMN	ARY FOR PHILLIPS IN	ET DACH!	
STING LQ WETLANDS	123.30 AC	DOCT THE EIF S 141	ET DAJIN	
STING HQ WETLANDS	18.07 AC			
TOTAL WETLANDS	141.37 AC			·
				······
LQ WETLAND IMPACTS*	19.71 AC	15 00% /	E EVICT LO META	
HQ WETLAND IMPACTS"	0.70 AC	15.99% OF EXIST LQ WETLANDS		
Q BOARDWALK IMPACTS	0.04 AC	3.87% OF EXIST HQ WETLANDS		
Q BOARDWALK IMPACTS	0.11 AC			
TOTAL IMPACTS**	20.56 AC	44 546/ 05	EVIOT YOU'L AND TO	
		14.54% OF	EXIST TOTAL WETLA	NDS



(850) 265-1056

600 Ohio Avenue, Suite A Lynn Haven, FL 32444

JAMIE H. GWACTHET PE No. 63762 MAR 2 8 2007

INCLUDING BOARDWALK IMPACTS

# WETLAND IMPACT SUMMARY WATERSOUND NORTH PHASE I

03/15/07

WETLAND MEACH		COASTAL BASII	V	
WETLAND IMPACT		DEVELOPMENT	IMPACTS FROM BOARDWALK S	
NO.	LOW QUALITY	HIGH QUALITY	LOW QUALITY	HIGH QUALITY
	AC.	AC.	AC.	AC.
08-01	0.05			
09-01	0.20			<del></del>
13-01	0.36			
14-01	0.22			
14-02	0.28			
15-01			0.02	
15-02	0.32			
16-01	0.31	*****		
16-02		0.08		
17-01	0.54			
TOTAL IMPACTS	2.28	0.08	0.02	
		0.00	0.02	0.00
WE	TLAND IMPACT SUM	MARY FOR INTRACOA	STAL BASIN	
XISTING LQ WETLANDS	12.56 AC			
XISTING HQ WETLANDS	16.99 AC		***************************************	
TOTAL WETLANDS	29.55 AC		***************************************	
LQ WETLAND IMPACTS*				•
HQ WETLAND IMPACTS*	2.28 AC		OF EXIST LQ WETLA	***
LQ BOARDWALK IMPACTS	0.08 AC	0.47%	OF EXIST HQ WETLAN	IDS
	0.02 AC			
HQ BOARDWALK IMPACTS	0.00 AC			
TOTAL IMPACTS**	2.38 AC	8.05% OF EXIST TOTAL WETLANDS		

<sup>\*</sup> NON BOARDWALK IMPACTS

<sup>\*\*</sup> INCLUDING BOARDWALK IMPACTS

	OVERALL F	PHASE I SUMMARY
WETLAND	IMPACT SUMMARY	WITHIN 565.62 AC PROJECT BOUNDARY)
EXISTING LQ WETLANDS	135.86 AC	
EXISTING HQ WETLANDS	35.06 AC	
TOTAL WETLANDS	170.92 AC	
LQ WETLAND IMPACTS*	21.99 AC	16.19% OF EXIST LQ WETLANDS
HQ WETLAND IMPACTS*	0.78 AC	2.22% OF EXIST HQ WETLANDS
LQ BOARDWALK IMPACTS	0.06 AC	THE WOOD CARDY THE WELLANDS
HQ BOARDWALK IMPACTS	0.11 AC	
TOTAL IMPACTS**	22.94 AC	13.42% OF EXIST TOTAL WETLANDS

- \* NON BOARDWALK IMPACTS
- \*\* INCLUDING BOARDWALK IMPACTS



Kimley-Horn and Associates, Inc.

600 Ohio Avenue, Suite A Lynn Haven, FL 32444 (850) 265-1056 JAMIE N. GWALTHET PE NO. 63762 MAR 2 3 2007

### DREDGE AND FILL LEGEND ADJACENT SHEET NO.

SHEET MARKER SHEET MATCH LINE **PROJECT LIMITS** HIGH QUALITY WETLAND BUFFER (30' MIN. - 50' AVG.) CONSERVATION EASEMENT RIGHT OF WAY NON-JURISDICTIONAL WETLAND HIGH QUALITY WETLAND LOW QUALITY WETLAND WETLAND IMPACT - HIGH QUALITY WETLAND IMPACT - LOW QUALITY **BOARDWALK** 

STORMWATER MANAGEMENT FACILITY

ADJACENT SHEET ~ACREAGE NO. WETLANDS IMPACT HQ-01-02 - 0.01 AC. **IDENTIFICATION LABEL** -IMPACT NO. PAGE NO.

JAMJEN, GWALTNEY P.E. NO. 63762

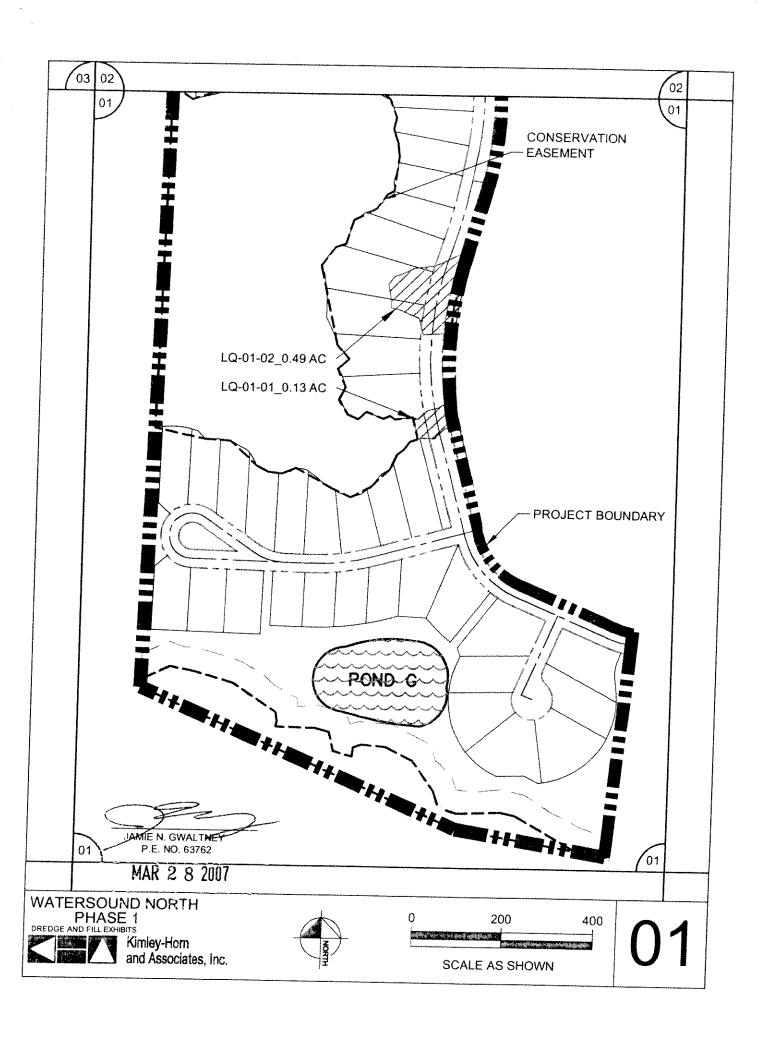
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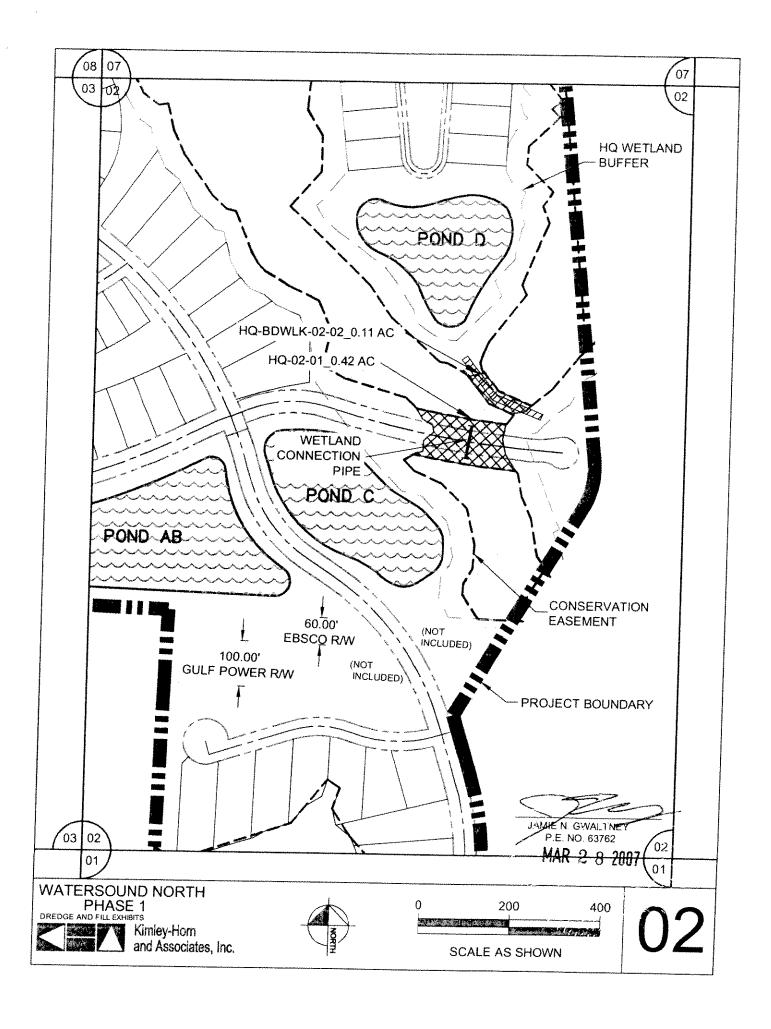
WATERSOUND NORTH PHASE 1

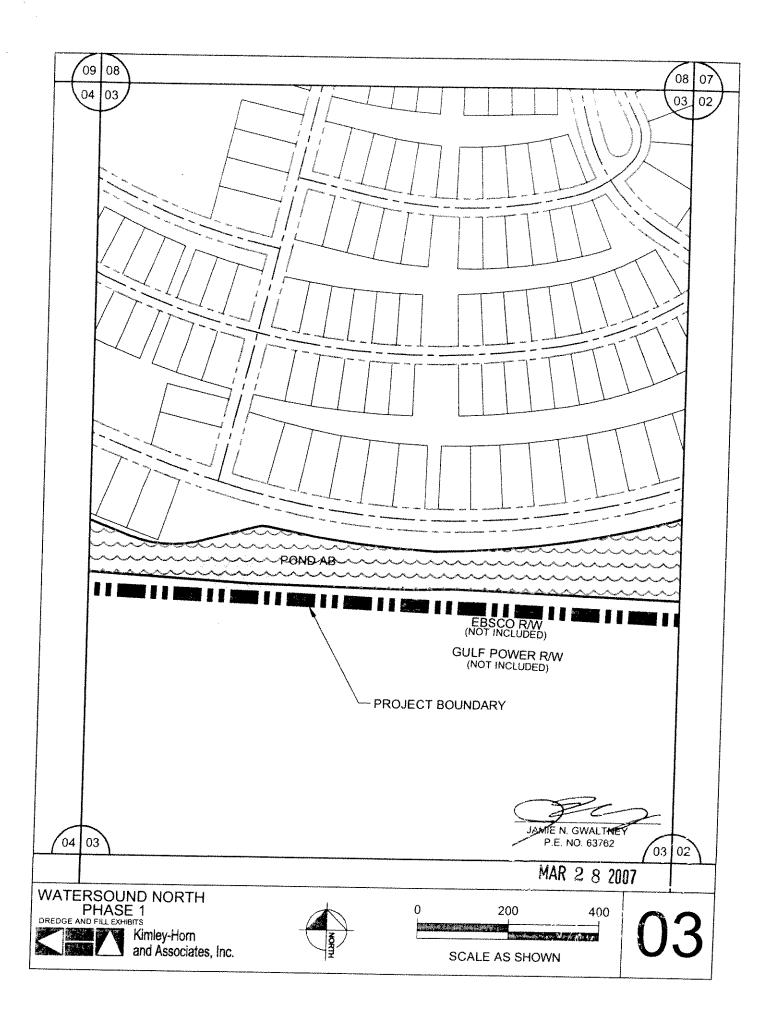
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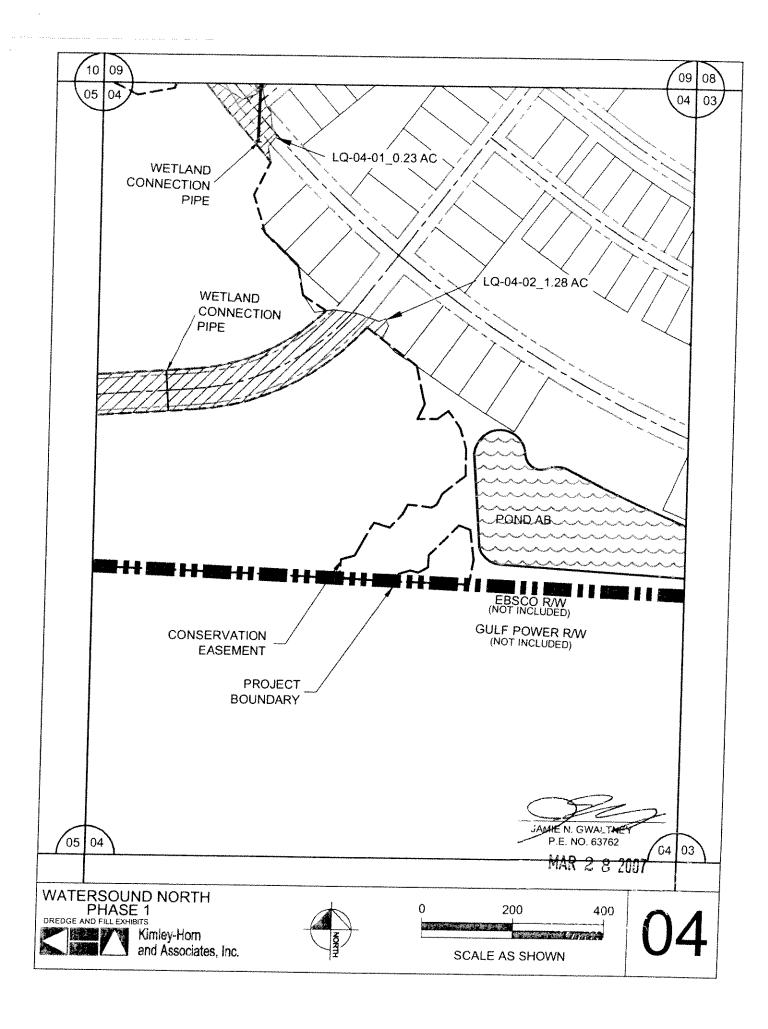
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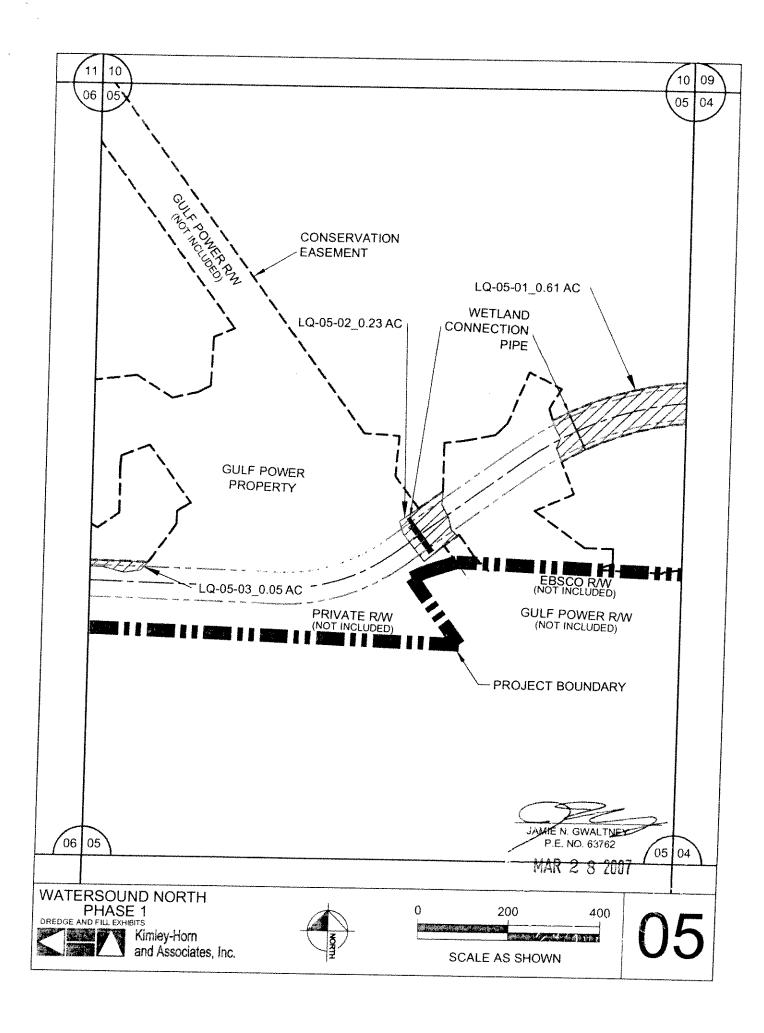
WETLAND QUALITY

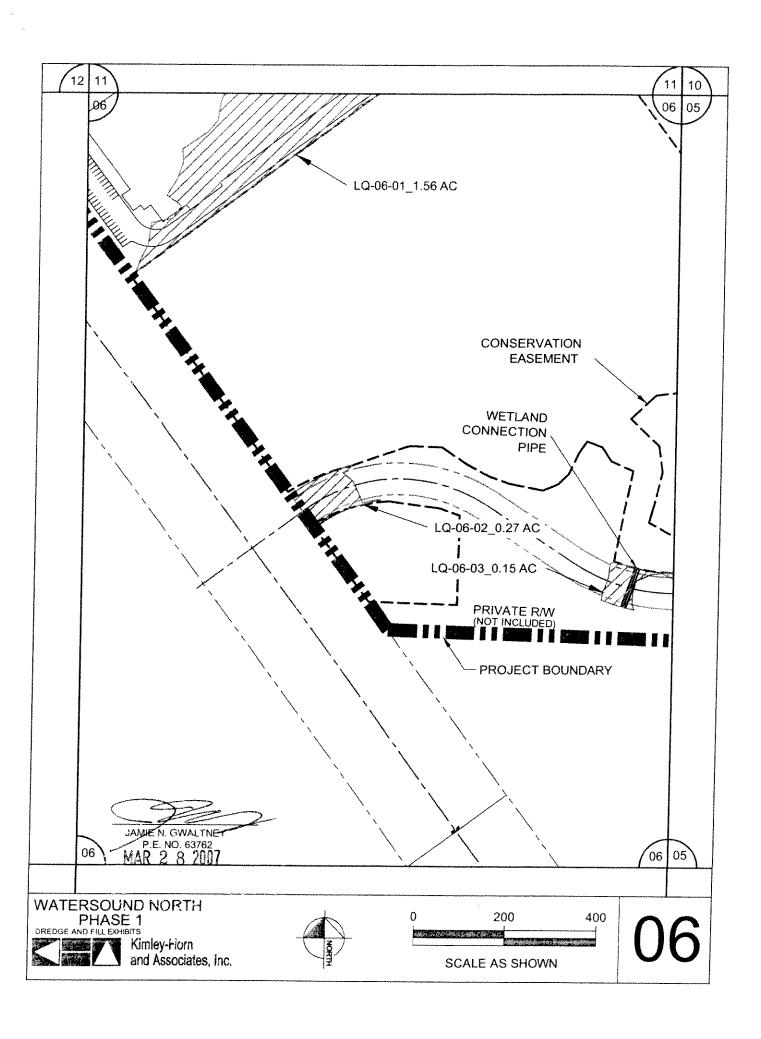


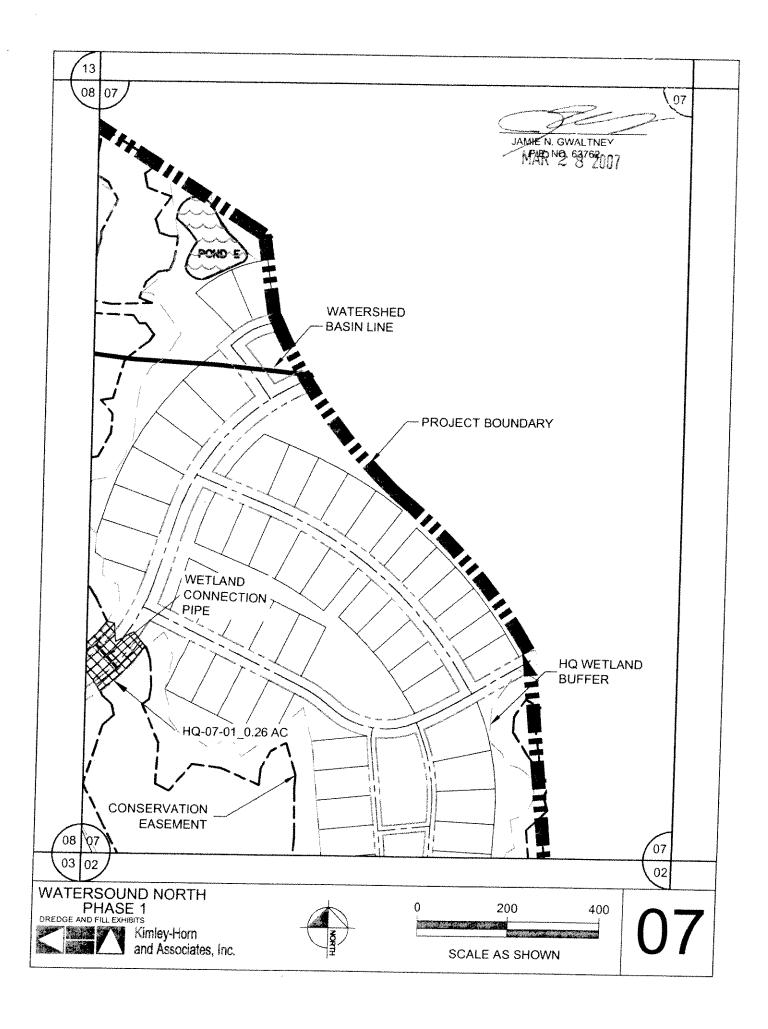


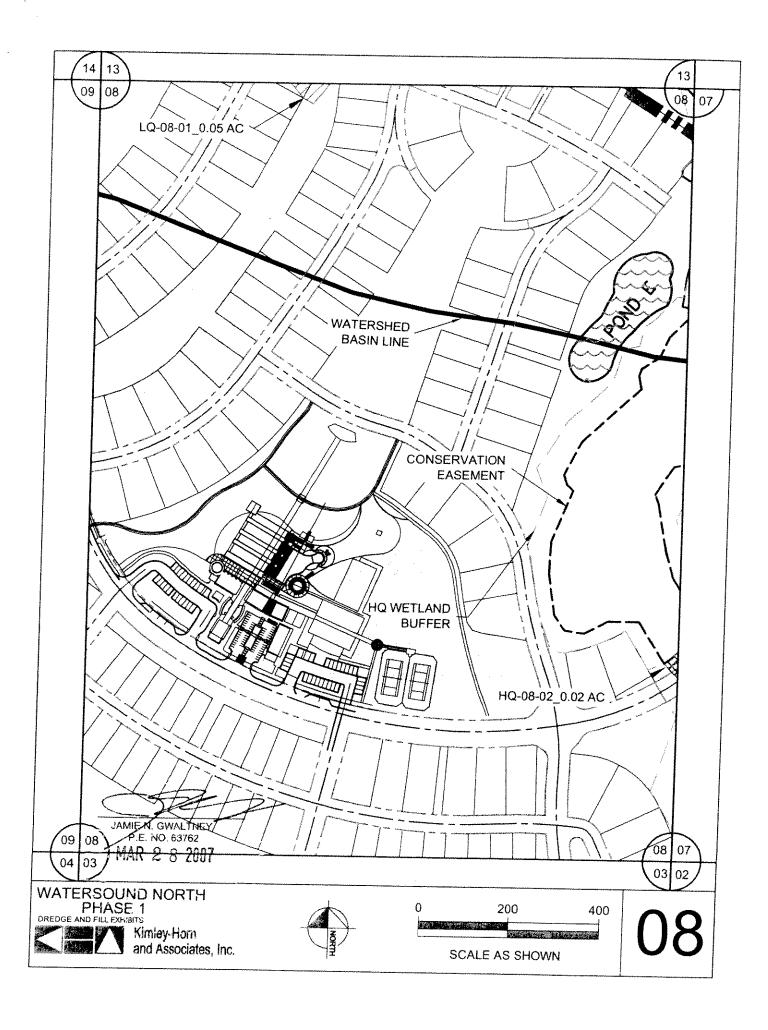


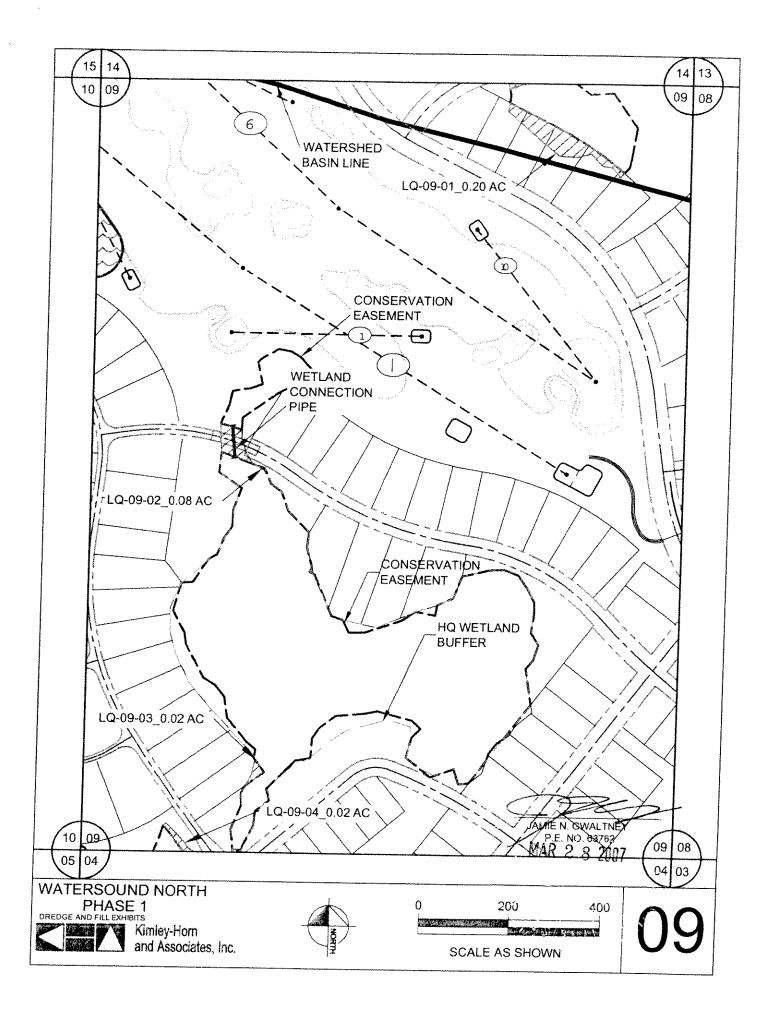


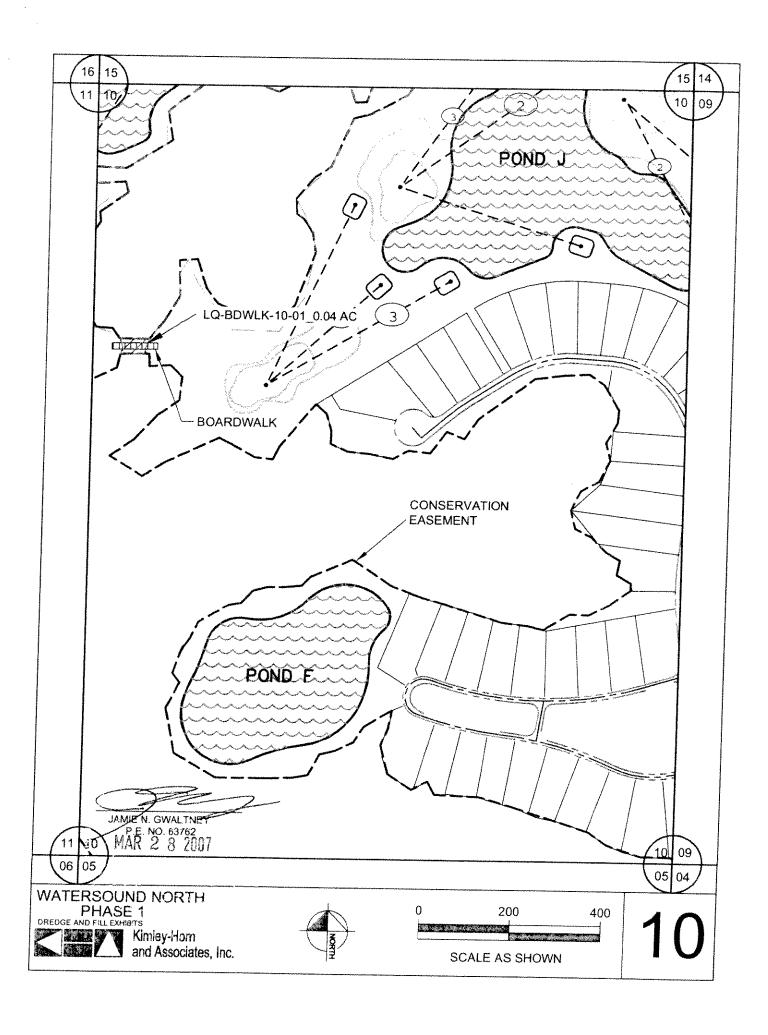


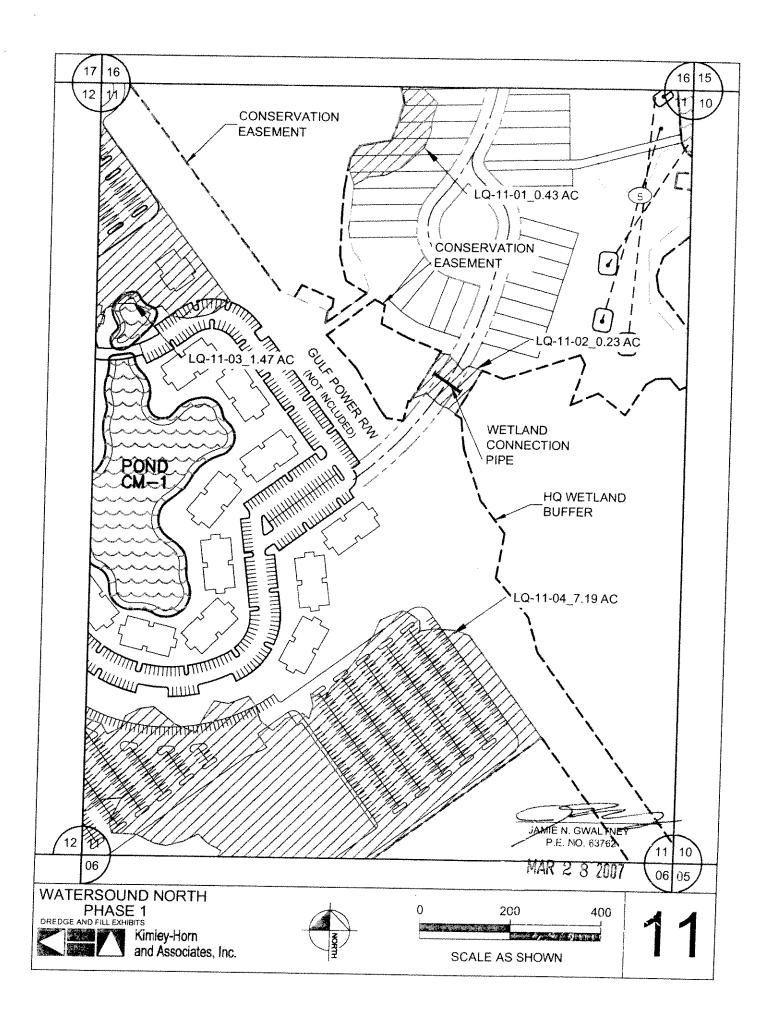


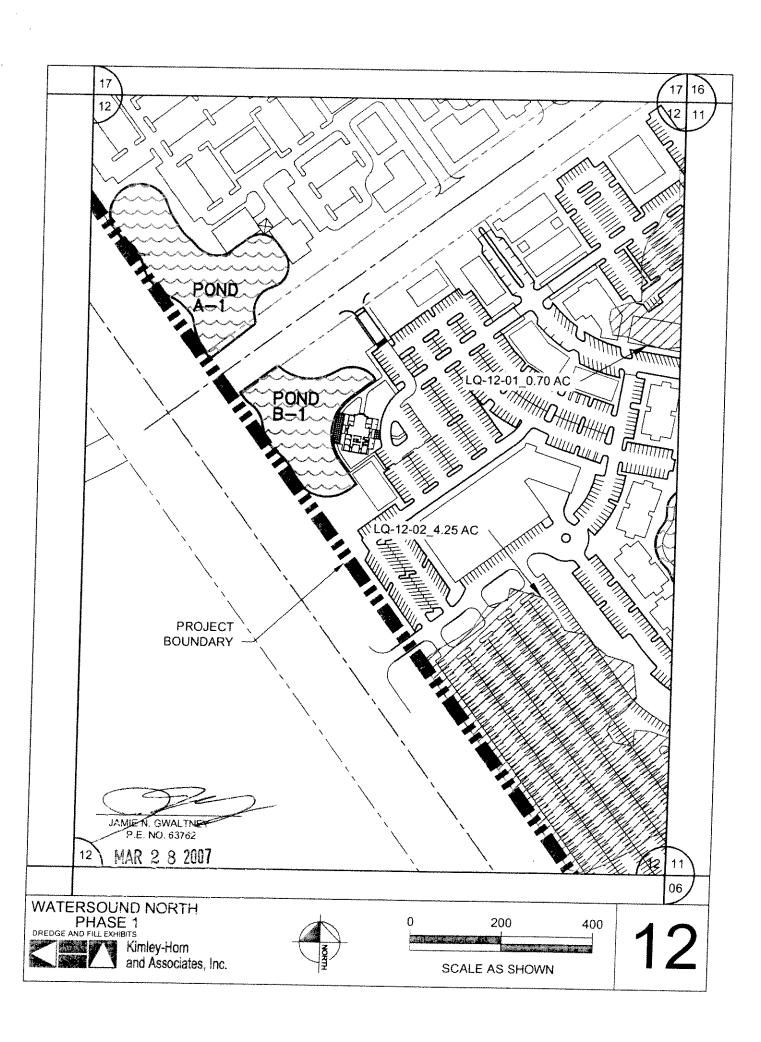


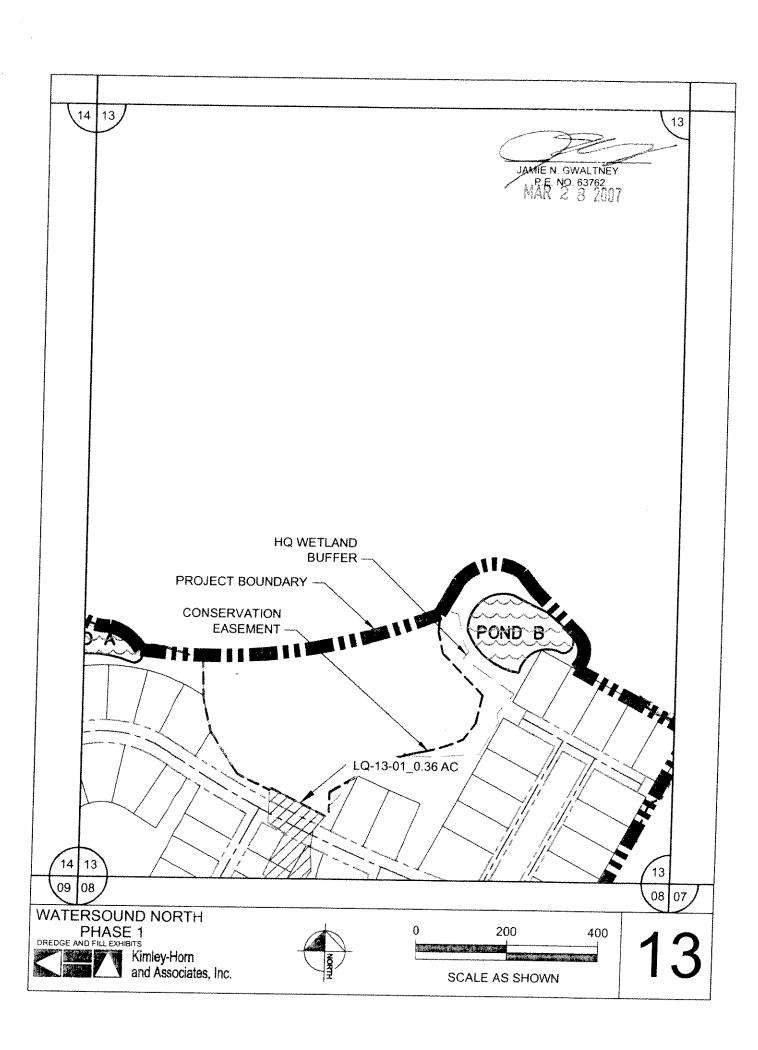


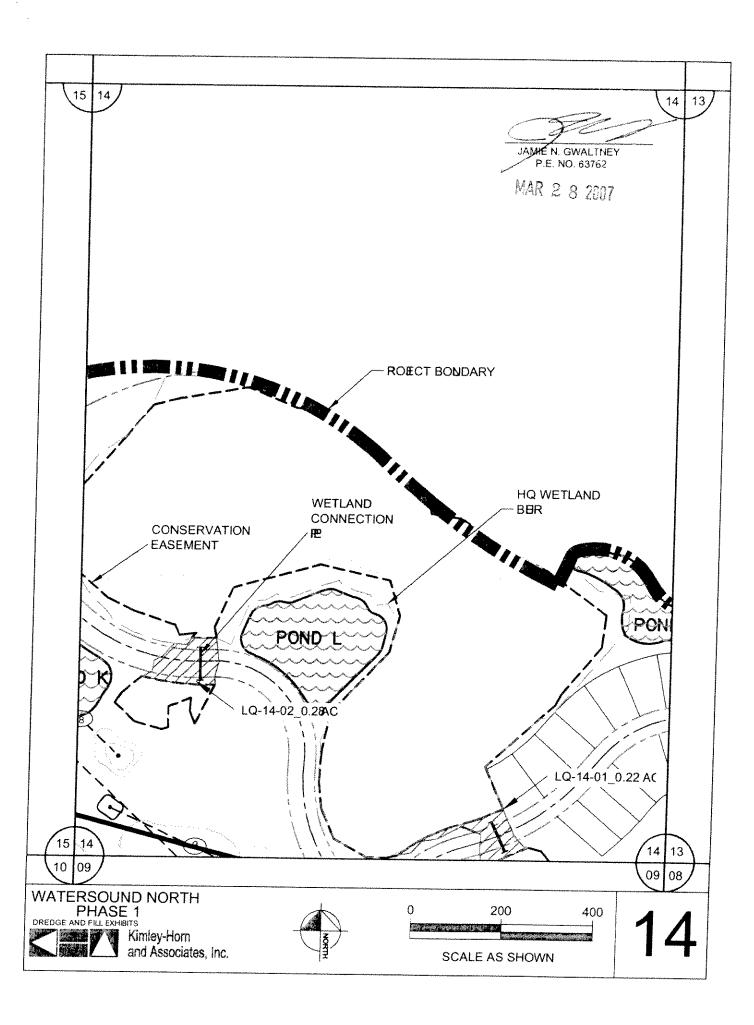


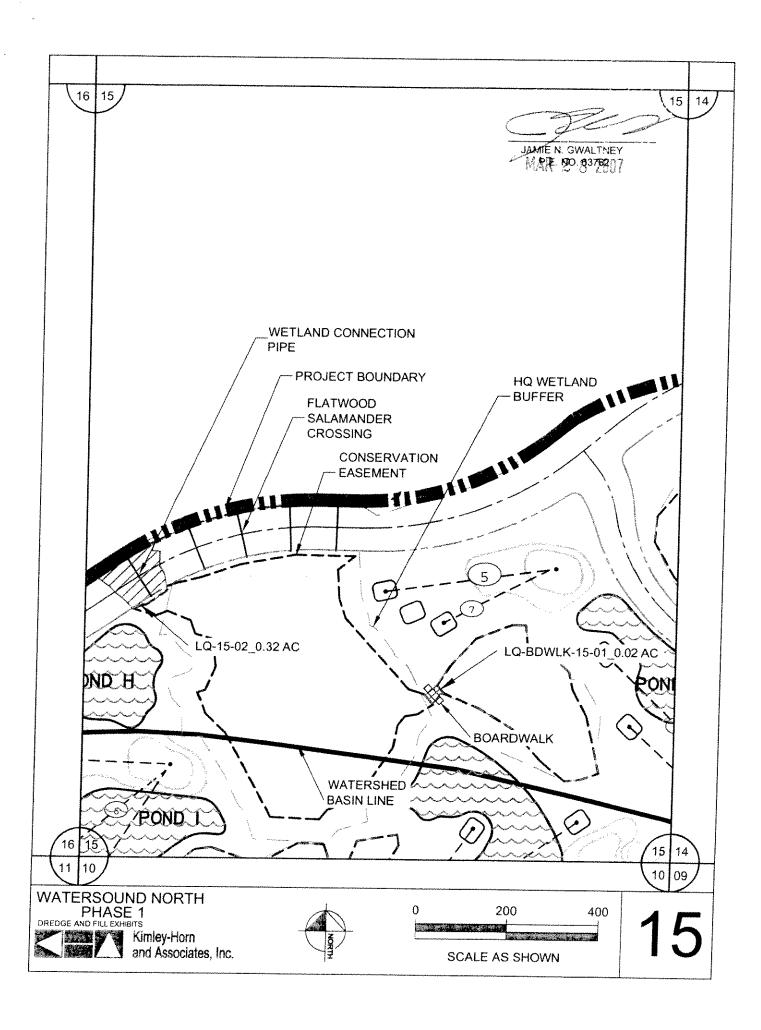


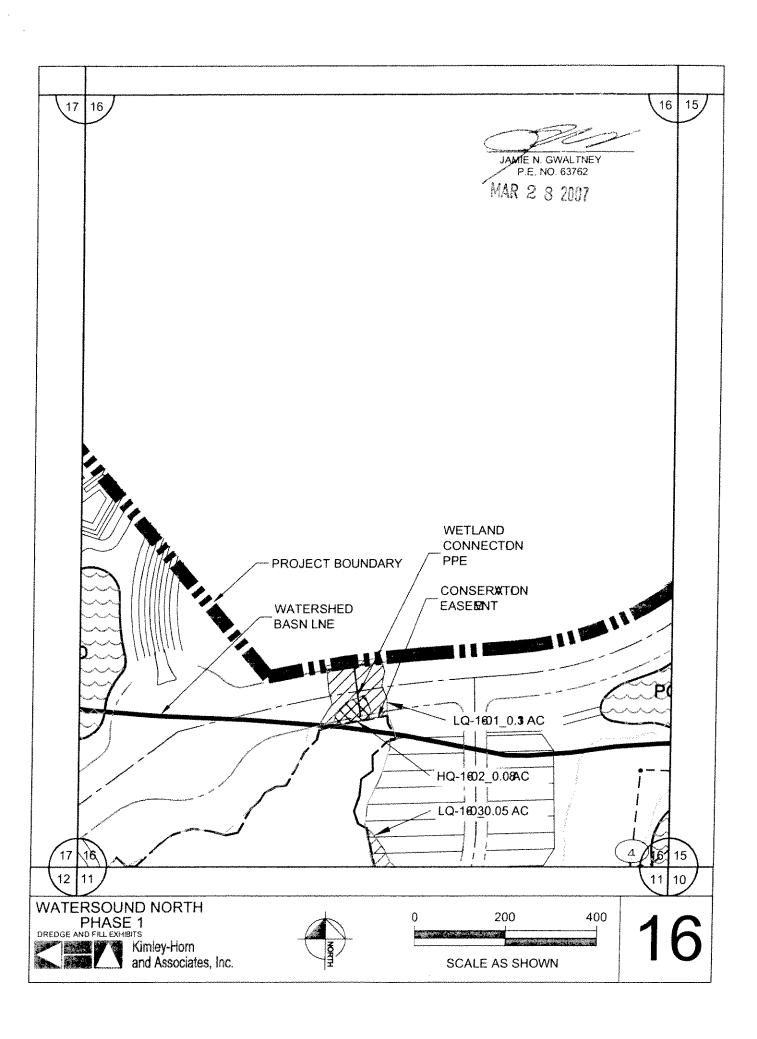


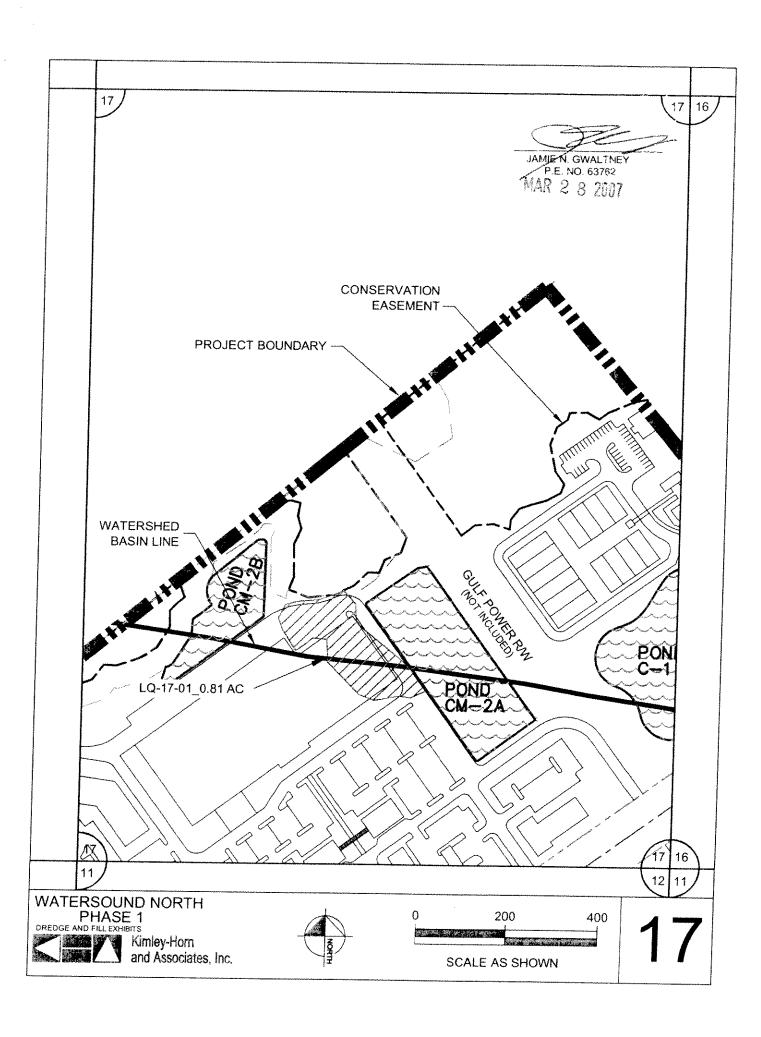


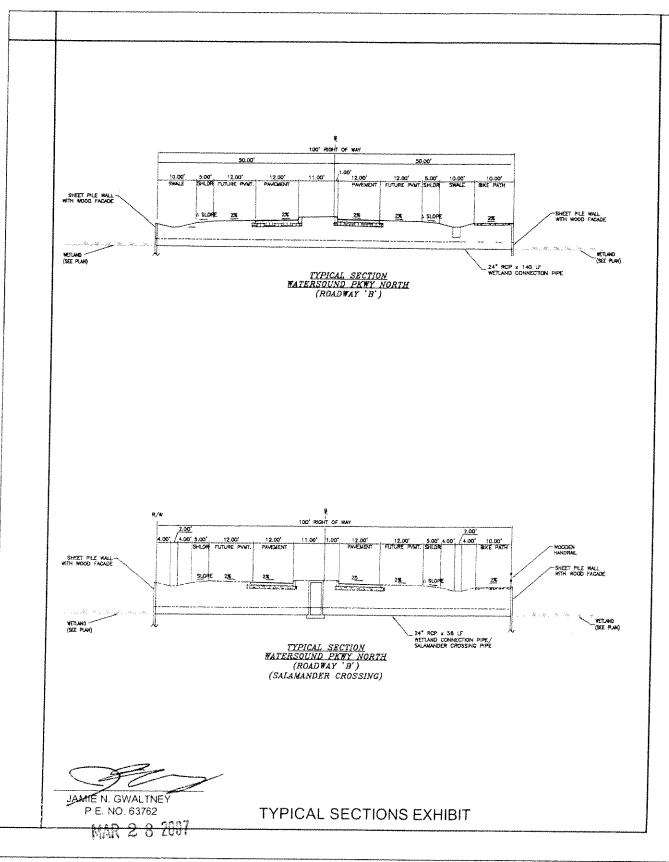














DREDGE AND FILL EXHIBITS



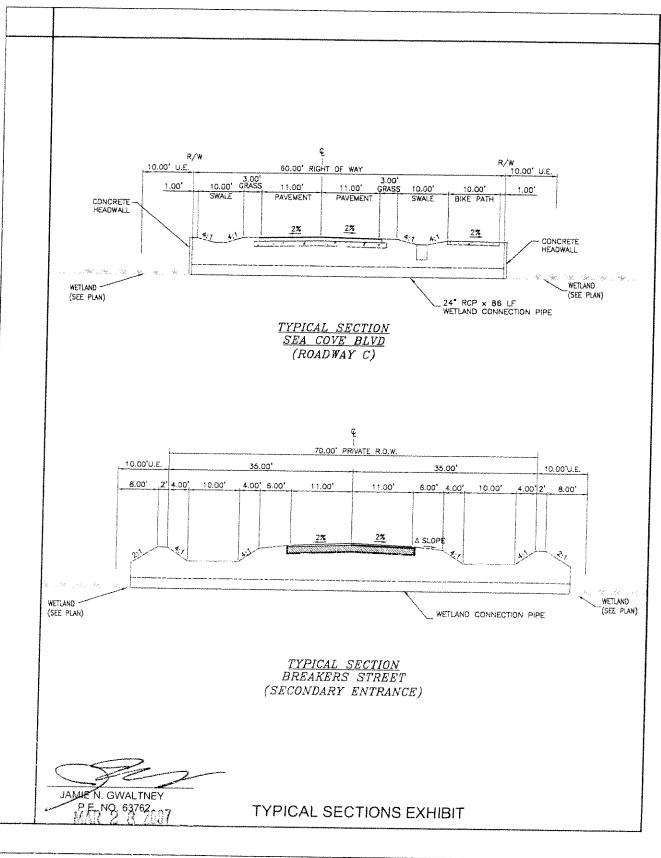
Kimley-Hom and Associates, Inc.

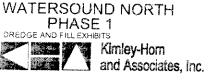


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SCALE AS SHOWN

18

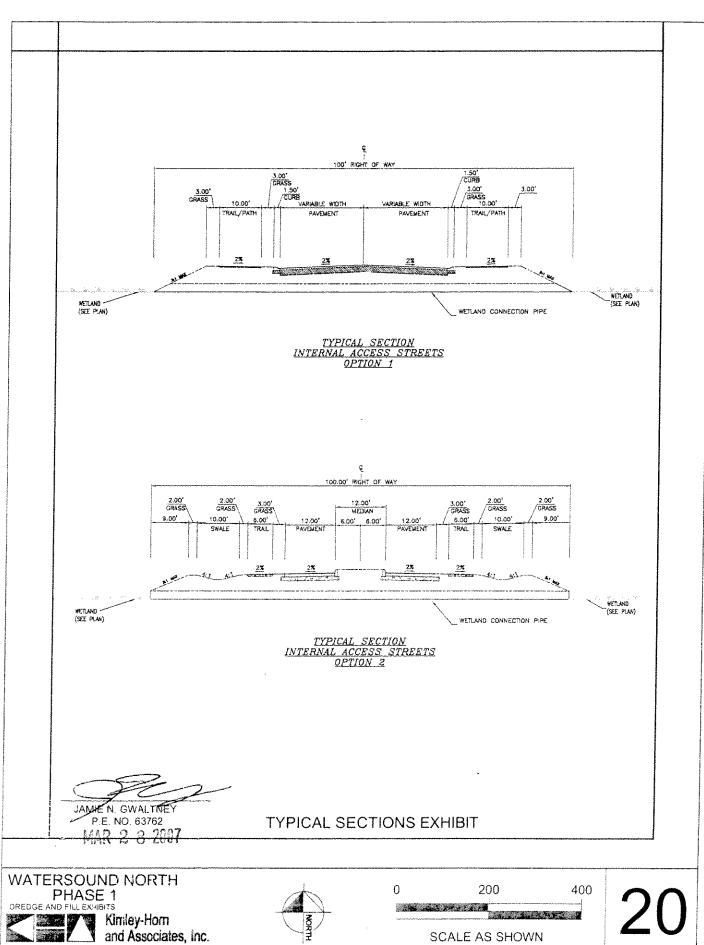






0 200 400 SCALE AS SHOWN

19



SCALE AS SHOWN

Bank.

#### **MITIGATION TABLES**

#### Lake Powell Basin- Phillips Inlet Basin

Table 1. Wetland Impacts (Phillips Inlet sub-basin)

Wetland Category	Total (Ac)	Impacted (Ac)	Preserved (Ac)	Percent Impacts
Low-Quality Wetlands	123.30	19.75*	103.55	16.01 %
High-Quality Wetlands	18.07	0.81*	17.26	4.48 %

<sup>\*</sup> Boardwalk impacts included (0.04 LQ and 0.11 HQ Ac)

Table 2. Calculation to meet 80/20 preservation requirement (Phillips Inlet Basin)

123.3 Acres - 19.75 Acres (On-site LQW*) - (Impacted LQW)	= 103.55 Acres preserved onsite
19.75 Acres X 4 (Impacted LQW)	= 79 Acres (LQW preserved)
103.55 Acres - 79 Acres (LQW preserved on-site – LQW preservation required)	= 24.55 Acres exceeding the 80/20 requirement

<sup>\*</sup> LQW- Low Quality Wetlands

Table 3. Percentage of total area within the Phillips Inlet Sub-Basin.

Sub-Basin	Total Developable Area of Sub-Basin	Project Area	Percentage of Basin
PIWB	7,949.97 Ac	464.52 Ac	5.84 %

Table 4. Total preservation area in Lake Powell Headwaters Conservation Unit (LPHCU).

Conservation Unit (CU)	Total Area of CU	Acreage of preservation	Percentage of CU	
LPHCU	912 Ac	53.26 Ac	5.84 %	

Table 5. Restoration Scores for LPHCU ~ As Previously Permitted

Polygon Description 441- Planted Pine 632 -Shrub Bog	Ac	Existing conditions score	With mit score	Scoring delta (Lift)	Time Lag/ Risk	Functional Units
1) 441H to Hydric pine						
flatwoods	14.7	0.65	1	0.35	0.900	4.63
2) 441H to Wet						7.00
prairie/Savannah	7.0	0.65	1	0.35	0.900	2.20
3) 632 to Mixed hardwood-						
cypress	64.9	0.92	1	0.08	0.900	4.67
4) 441 Upland Forest	19.5	0.82	0.96	0.14	1.000	2.73
Total Functional Gain	106.1	2.22	3	0.78		14.23

Table 6. Functional Loss within Phillips Inlet sub-basin

Wetland Impacts	Functional Units (FU)	Total FU
19.75 Acres (LQW)	0.65	12.84
0.81 Acres (HQW)	0.92	0.75
	Functional Loss	13.59
	Functional Gain	14.23

#### Devil's Swamp Basin- Intracoastal Basin

Table 1. Wetland Impacts (Direct to Bay sub-basin)

Wetland Category	Total (Ac)	Impacted (Ac)	Preserved (Ac)	Percent Impacts
Low-Quality Wetlands	12.56	2.3*	10.26	18.31 %
High-Quality Wetlands	16.99	0.08	16.91	0.47 %

<sup>\*</sup> Boardwalk impacts included (0.02 LQ Ac)

Table 2. Calculations of preservation acreage to meet 80/20 (Direct to Bay Basin)

12.56 Acres - 2.3 Acres (On-site LQW*) (Impacted LQW)	= 10.26 Acres preserved onsite
2.3 Acres X 4 (Impacted LQW)	= 9.2 Acres (LQW preservation req.)
10.26 Acres - 9.2 Acres (LQW preserved - LQW preservation required)	= 1.06 Acres exceeding the 80/20 requirements

<sup>\*</sup>LQW=Low Quality Wetlands

Table 3. Percentage of total area within the Direct to Bay Sub-Basin.

Sub-Basin	Total Developable Area of Sub-Basin	Project Area	Percentage of Basin	
DRBWB	10,683.66 Ac.	101.1 Ac.	0.94 %	

Table 4. Total preservation area in Wildlife Corridor Conservation Unit (WCCU).

Conservation Unit (CU)	Total Area of CU	Acreage of preservation	Percentage of CU
wccu	1,247 Ac.	11.72 Ac.	0.94 %

Table 5. Credits debited from Devil's Swamp Point Mitigation Bank.

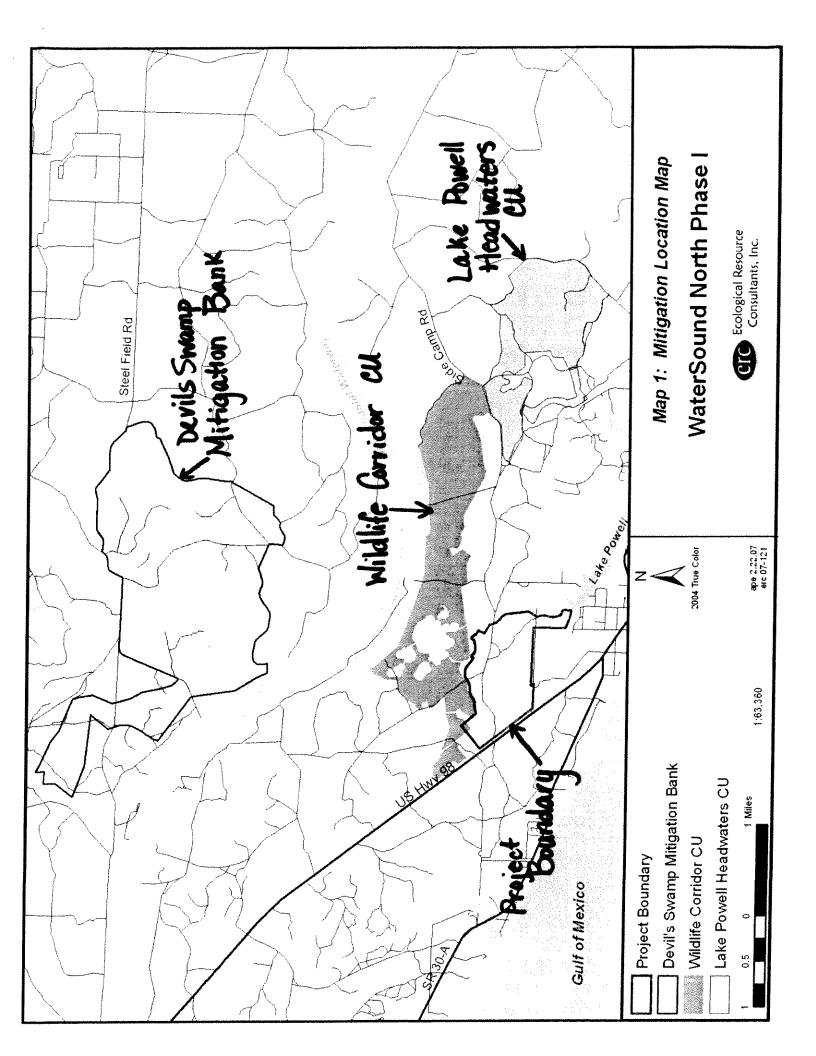
Wetland Impacts	Functional Units	Total Credits
2.3 Acres (LQW)	0.65	1.50
0.08 Acres (HQW)	0.921	0.07
	TOTAL	1.57

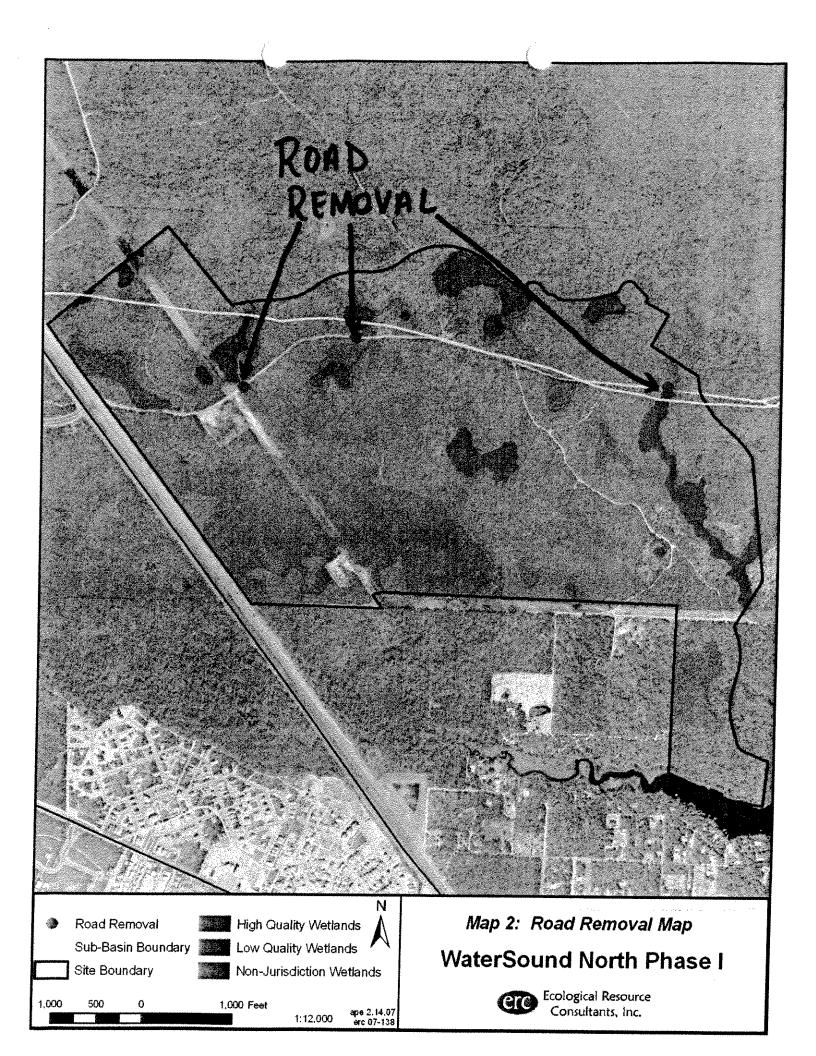
#### **MITIGATION SUMMARY**

- 147.98 Acres of onsite wetland preservation (113.81 acres LQW, 34.17 acres HQW)
- 11.72 Acres of preservation placed in CE within the Wildlife Corridor Conservation Unit.
- 106.1 Acres of active restoration including the required 53.26 acres of preservation within Lake Powell Headwaters Conservation Unit.
- 1.57 Credits from the Devil's Swamp Mitigation Bank

<sup>\*</sup>LQW=Low Quality Wetlands \*HQW=High Quality Wetlands

1Functional units for low and high quality wetlands as defined in the EMA.





#### Compensatory Mitigation Plan for WaterSound North Phase I

## I. Preservation and Compensatory Mitigation Plan Summary: WaterSound North Phase I

To satisfy the permitting requirements of the Army Corps of Engineers (Corps) and Florida Department of Environmental Protection (FDEP), mitigation is proposed for the wetland impacts associated with the construction of WaterSound North Phase I, the mixed use development and associated road crossings. The proposed total acreage of on-site wetland impacts is 22.94 acres of ACOE/FDEP regulated wetland habitat. Impacts within the Phillips Inlet Watershed Basin (PIWB) will be mitigated at the Lake Powell Headwaters Conservation Unit (LPHCU). Impacts within the Direct Runoff to Bay Watershed Basin (DRBWB) will be mitigated at the Devil's Swamp Mitigation Bank (DSMB).

To offset the 22.94 acres of impacts, on-site preservation of 147.98 acres of remaining wetland habitat is proposed. In addition, 106.1 Ac of restoration within LPHCU, 11.72 Ac of preservation within the Wildlife Corridor Conservation Unit (WCCU), and 1.57 credits debited from DSMB. A conservation easement will be placed on the on-site wetland preservation and LPHCU restoration area with the FDEP as the grantee.

#### II. Preservation of On-site Wetland Habitat: WaterSound North Phase I

#### A. Management Plan: Preservation of On-site Wetlands

- 1. Goals & Objectives: 147.98 acres of on-site preservation is proposed. The on-site preservation is being proposed in order to demonstrate compliance with the 80/20 preservation requirement of the RGP and EMA. The preservation area exceeds the 80/20 requirement.
- 2. **Site Location**: The on-site areas proposed for preservation are located throughout the site. Preserved areas are depicted in the attached engineer drawings (Attachment F).
- B. Conservation Easement: The on-site wetland habitat proposed for preservation will be placed into a conservation easement with FDEP as grantee that will be recorded in Walton County. Hence, the preservation site will be preserved in perpetuity.

#### III. Restoration of On-site Silviculture Roadways

#### A. Management Plan: Restoration of Silviculture Roadways

Goals & Objectives: The existing high quality roadway crossings that are
not being utilized in the design will be restored. The restoration of the
existing roadways that bisect high quality wetlands will compensate for
the reduced wetland function resulting from development impacts.

- 2. Site Location: WaterSound North is located in Sections 23, 24, 25, 26, Township 3 South, Range 18 West, Walton County, Florida. Three existing on-site silviculture roadway crossings are proposed for restoration. Restoration of three roadway crossings will compensate for the three new construction roadway crossings on WSN. Please see Map 2 for the on-site roadway removal locations.
- 3. Existing Features: The areas to be restored are filled silviculture roadways and excavated ditches. Roadway construction for silviculture management destroyed the previously existing plant communities, degraded adjacent water quality with sedimentation, and severely affected the hydrology of the system.
- 4. **Historic Vegetative Community:** The on-site soil and vegetative indices, in conjunction with historic data, suggests that prior to silvicultural management, the wetland habitat would have been classified as Basin Swamps and Wet Prairie.
- 5. Restoration Methodology: Appropriate restoration requires identification of historic on-site habitat. Various data sources were utilized for this analysis including historic documentation, aerial photo interpretation, expert opinion, soils series classification, and comparison to the adjacent undisturbed ecosystems. To achieve the goals set forth in the compensatory mitigation plan, restoration of the different wetland ecosystems will be achieved by hydrological restoration (removing of fill and leveling of ditches), vegetative restoration (seeding of appropriate herbaceous species, planting of tree and shrub species), exotic species removal and a long-term management plan for maintenance.
- 6. Hydrological Restoration: Prior to roadway removal, natural grade will be recorded in the adjacent wetland ecosystem. Soil borings will be taken with hand augers at intervals of 10 ft on center in the roadway area. These soil borings will be analyzed to show the depth of the roadway fill. The information will be used when excavating the site to determine the depth of excavation. The ditches will be leveled to the established grade. The leveled area will be stabilized following final grade. If needed, the disturbed soil will be planted with appropriate wetland plants. Silt fencing and/or turbidity curtains will be erected to prevent erosion. All Best Management Practices (BMPs) will be implemented during the restoration.
- 7. Vegetative Restoration: The surrounding natural community species composition and percent cover will be recorded prior to roadway removal. Transplantation of young shrubs, trees and herbaceous plants from impact areas to restoration areas will be conducted where feasible. The seeds of native plants will be seeded after final grade establishment. If plantings are needed, appropriate herbaceous bare root plants will be planted at intervals of 3 ft on center. If a shrub layer is deemed inappropriate and this suppresses the herbaceous layer, then the shrubs and woody vines will be controlled either using herbicide and/or other fire-mimicking mechanical techniques.

- 8. Exotic and Invasive Species Removal: The predominant exotic plant species located in the wetland ecosystems is popcorn tree (Sapium sebiferum). The predominant nuisance but native species is cattail (Typha spp). An herbicide appropriate for the target species will be used as directed by the label so as not to degrade water quality.
- B. Monitoring Plan and Success Criteria: Monitoring will be conducted annually beginning in the Fall of 2006 and will continue through the Fall of 2011 or until success criteria are met, whichever occurs first. Six monitoring reports will be submitted. These include a baseline report in the Fall of 2006 and five additional annual monitoring reports. The baseline data will be gathered in the first monitoring report. The baseline report will document the site conditions prior to implementation of the restoration. The monitoring reports will document the site conditions as the site is actively restored. Monitoring reports will be submitted to Corps, FDEP, United States fish and Wildlife Service (USFWS), and the Environmental Protection (EPA).
  - Hydrological Monitoring: The hydrology will be recorded by describing the hydric soils and measuring free water in soil pits. The sampling will be directed within and adjacent to the vegetative monitoring plots. Four soil samples will be taken for each roadway crossing restoration. Two soil samples will be examined in the undisturbed areas on both sides of the vegetative monitoring plots associated with the restoration of the roadway and two soil samples will be installed within the regraded roadway vegetative monitoring plots to ensure similar free water measurements. The depth to free water will be recorded in inches. The occurrence of hydric soil characteristics, e.g. redoximorphic features and depth of fill removal will be recorded. Hydrological indices that are listed in the 1987 Corps manual as primary or secondary hydrological indices will be documented
  - Vegetative Monitoring: Vegetative monitoring will be conducted within one permanent 400 sq ft plot per roadway crossing removal site. The four corners of the plots will be surveyed by submeter GPS and the points will be permanently labeled in the field. The baseline study will include a plant list, estimated coverage by a particular plant species, soils classification and photographs of the individual plots. A detailed summary of the findings will be submitted to the agencies after each monitoring session. Parameters documented during monitoring will include species list, species coverage, photograph of plot and soils description within plots.
  - 3. **Field Sampling Methods**: The letter for each field sampling method corresponds to the goal with the same letter listed above.
    - a. Vegetative species within the plots will be recorded. The percent cover of groundcover species will be recorded in the 400 square foot plots and the coverage, density and frequency will be recorded within the 50 meter transect subplots. Percent cover of each species within all monitoring

plot will be estimated visually using a modification of Daubenmire's coverage classes (Daubenmire 1959). The six coverage classes have the following ranges of percent coverage: 1) 0-5, 2) 6-25, 3)26-50, 4) 51-75, 5) 76-96, 6) 97-100.

- b. Shrubs and woody vines within the groundcover will be recorded.
- c. The abundance of exotic species will be recorded within the monitoring plots. Exotic species will be recorded by name and location. Exotic species within the mitigation area will be removed using the appropriate control treatment.
- d. Free water and hydric soil characteristics will be recorded for the soil pits within the plots used for sampling the roadway crossing restoration sites.
- 4. Success Criteria: The mitigation will be considered successful if there is a minimum of 50% coverage by appropriate species and the total cover of invasive exotic species is less than 1% within the monitoring plots.
- Contingency Plan: Adaptive management plans will be developed to address any potential problems that may develop during restoration to ensure success.

#### IV. Restoration of Off-site Wetland Habitat: LPHCU and DSBANK

#### A. Site Conditions

1. Site Location: Two different off-site mitigation areas are proposed to compensate for impacts. Impacts within the PIWB will be mitigated at the LPHCU. Impacts within the DRBWB will be mitigated at the DSBANK. The sites were selected in compliance with the RGP and EMA and because of the desirable biological conditions and geographic location.

LPHCU is located in Sections 20-22, 27-29 and 34 Township 2 South, Range 17 West, Bay County, Florida. The mitigation site is located approximately 11,000 linear feet east of the impact site within the same regional sub-basin. The mitigation site is contained within approximately 921 acres of undeveloped land available for future restoration and conservation. The mitigation site contains 106.1 acres of wetland restoration. The watershed is under development pressure, and environmental groups and regulators have expressed concern regarding the threats to natural habitat within this vicinity.

DSBANK is located in Sections 1, 2, 11, and 12, Township 2 South, Range 18 West, Walton County, Florida. The mitigation bank is located approximately 7,500 linear feet northwest of the impact site within the same regional sub-basin. The mitigation site is contained within approximately 3,052 acres of undeveloped land designated for mitigation.

2. Existing Vegetative Communities/Features: The dominant wetland vegetation includes Pinus elliottii, Cyrilla racemiflora, Cliftonia monophylla, llex coriacea, llex glabra, Smilax laurifolia, Hypericum fasciculatum, Aristida spp., Andropogon glomeratus var. glaucopsis, Andropogon perangustatus, Dichanthelium scabriusculum and Paspalum

praecox. Sparse species include Eriocaulon decangulare, Rhexia alifanus, Ludwigia spp., Polygala lutea, Rhynchospora cephalantha, Rhynchospora curtissii, Rhynchospora fascicularis, Scleria baldwinii, Scleria georgiana, Drosera capillaris, Aster chapmanii, Coreopsis linifolia. Euthamia minor, Juncus marginatus, Liatris spicata and Xvris difformis. Alterations in vegetative succession are strongly pronounced. Numerous shrub species now dominate historic pine/wiregrass flatwoods or wet prairie ecosystems because of restriction of the natural fire regime. The existing plant communities have been degraded by woody species encroachment. The species composition is dominated by Cyrilla racemiflora, Cliftonia monophylla, llex coriacea, llex glabra, Andropogon spp., Smilax laurifolia and Hypericum fasciculatum with suppressed individuals from the historic system occurring in the herbaceous layer. Herbaceous seeds within the topsoil (the seed bank) are unable to germinate due to the dominance of the aggressive shrub species. Silvicultural practices have masked variations in the on-site ecotones.

The proposed LPHCU and DSBANK mitigation sites consist of wetland habitat with small areas of planted pine upland habitat scattered throughout the landscape. The upland habitat is located in microsites that are approximately 6 inches to 12 inches higher in topographic gradient than the adjacent wetlands. The dominant vegetation located in the planted pine uplands on the proposed mitigation site includes *Pinus elliottii, Cyrilla racemiflora, Ilex glabra, Smilax laurifolia, Serenoa repens, Aristida spp., Ilex glabra* and *Pteridum aquilinum.* The upland habitat is also highly degraded from forestry management practices.

Intensive forestry management practices have altered the on-site hydrology. The management practices include installation of elevated beds, roadways and ditches. Due to the disturbances, and fire suppression, exotic species are sparsely scattered throughout the site. The primary exotic plant is popcorn tree or *Sapium sebiferum*.

- 3. Historic Vegetative Community: The on-site soil and vegetative indices, in conjunction with historic data suggest, prior to silvicultural management practices, the wetland habitat in LPHCU and DSBANK would have been classified as Wet Savanna and Wet Cypress Savanna (FLUCCS classification would be Treeless Hydric Savanna, or Hydric Pine Savanna). The on-site historic ecological communities were dependent upon fire for maintenance of ecosystem function. Wet areas remain as stressed remnants of the historic ecosystem type. Scattered Cypress, Bay and Titi swamps are the wetland ecological communities. The sparse upland habitat would have been classified as Mesic (longleaf pine / wiregrass) Flatwood habitat.
- B. DSBANK: Management Plan: The mitigation and monitoring at the DSBANK will follow all rules and requirements set by the RGP/EMA. The number of credits required to be obtained will be authorized by the RGP/EMA Interagency Team prior the permit issuance.

#### C. LPHCU: Management Plan

1. Goals & Objectives: The goal of the proposed compensatory mitigation plan is to restore the managed planted pine habitats to the ecosystems that historically existed at the mitigation area. The specific goals include (1) restoration of the ecological integrity of the mitigation area as defined by species composition, community structure, and biodiversity (2) ecosystem health as defined by function and structure and (3) ecosystem stability. The mitigation plan is designed to provide a landscape net environmental benefit by preservation and restoration of the ecological function of the on-site upland and wetland ecosystems that are essential habitats for numerous floral and faunal species.

The primary mitigation objective is the enhancement of the environmental parameters in the LPHCU and DSBANK. The parameters targeted for enhancement include wildlife habitat, water storage, water conveyance, groundwater recharge, water treatment, plant community development, aquatic habitat support, wildlife habitat support, erosion control, and aesthetic qualities that increase overall net environmental function and quality of life for the public.

The mitigation properties are a component of a larger proposed mitigation area that will provide a continuum of upland and wetland ecosystems. The acreage of the proposed mitigation areas, in conjunction with surrounding lands, is sufficient to support wildlife and vegetative species and will also provide water quality benefits on a watershed level.

- 2. Restoration Methodology: The historic habitat was identified. Various data sources were utilized for this analysis that included historic documentation, aerial photo interpretation, expert opinion, soils series classification, remnant vegetative species composition and scientific research. To achieve the goals set forth in the compensatory mitigation plan, restoration of the native ecosystem will be achieved through hydrological restoration (plugging ditches, leveling ditches & chopping perpendicular to the bedding on 800' intervals), introduction of a prescribed burning regime, exotic species removal and a long-term management plan for maintenance.
  - 3. Prescribed Burning Restoration and/or Fire Mimicking Activities: The fuel loads may not require reduction prior to burning. BMPs will be used on the site. Firebreaks will be designed to meet or exceed BMP guidelines and will be rehabilitated immediately after burning. The existing roadways will be utilized as firebreaks when feasible.

The Department of Forestry requires a prescribed burn plan for the specific area that will be burned. Copies of the burn plan will be provided to the Corps and FDEP prior to all prescribed burning activities. An experienced, licensed, and insured burner will write the plan and supervise implementation of the plan. Existing roadways and natural barriers will be used for firebreaks where possible. When necessary, new

firebreaks will be disked and constructed in accordance with Department of Forestry (DOF) guidelines.

The baseline data will be collected and the first monitoring report was conducted in the Fall of 2006, prior to the first burn, and will document the existing on-site conditions. Prescribed burns are proposed as conditions allow. If conditions do not permit prescribed burning then fire- mimicking mechanical clearing will be utilized. Equipment may include general forestry equipment, gyro-tract, or bush hog. All necessary precautions will be takedn to aviod rutting of soils or other negative disturbacne. If possible the majority of the prescribed burning will be conducted in early spring-early summer, occasional winter burns will also be conducted as fuel loads allows.

- 4. Exotic and Invasive Species Removal: The predominant exotic plant species located in the ecosystems is popcorn tree (Sapium sebiferum). The predominant invasive herbaceous species is Cattail (Typha spp). The removal of the S. sebiferum and Typha spp. is proposed throughout the restored conservation area. The herbicide will be species specific and should neither kill non-targeted species in the vicinity nor degrade water quality. All herbicide will conform to the label specifications. Following initial treatment, prescribed burns and/or mechanical treatment are expected to control re-growth of inappropriate or invasive species.
- 5. Physical Stabilization: Ditch plugs and graded areas in the mitigation area will be stabilized. The ditch block and ditch fill drainage from the site will not require repairs with the exception of minor maintenance.
- 6. Contingency Plan: Adaptive management plans will be developed to address any potential problems that may develop during restoration to ensure success
- D. Conservation Easement: The 106.1 acres of wetland and upland habitat proposed for restoration in the LPHCU mitigation site will be placed into a conservation easement with FDEP as grantee that will be recorded in the official public records of Bay County, Florida.
- E. Field Sampling, Mitigation Monitoring and Success Determination:
  - 1. Qualitative Sampling

The initial vegetative monitoring will be carried out, pre-restoration, in the summer/fall and annually thereafter through the time period as specified in the permit. Two types of monitoring will be carried out, quantitative and qualitative. The quantitative monitoring /sampling will be through the use of transects, plots and point quarter method. The qualitative monitoring will use a walking transect to record species diversity and observations on the overall health, fecundity, distribution and wildlife usage and natural history, as well as any sightings of invasive exotics. The walking paths will be designed to ensure maximal coverage of all typical landscape/community types.

The specific parameters to be observed and recorded on the walking transects for all polygons include the following:

- 1. Estimated dominance of groundcover based on the following cover classes as per Braun/Blanquet scale (Barbour, et.al., 1980): 1= 0-1%; 2= 1-5%; 3=5-25%; 4=25-50%; 5=50-75%; 6=75-100%
- 2. Estimated dominance of canopy (if present) based on the following cover classes as per Braun/Blanquet scale: 1= 0-1%; 2= 1-5%; 3=5-25%; 4=25-50%; 5=50-75%; 6=75-100%
- Estimated height class of the majority of woody shrubs using the following scale:
   1 <0.5m; 2=0.5-2m; 3=2-5m; 4=5-10m; 5=10-15m; 6=15-20m; 7=20-35m; 8>35m
- Estimated abundance of weedy or ruderal species based on the following scale:
   1 =absent; 2= occasional <5% of a given area; 3>5% of a given area. In conjunction with these observations a list of commonly seen ruderal or weedy native species will be compiled.
- 5. Estimate of appropriateness of tree density and health.
- Notes on water table, hydrologic indicators, hydric soil indicators at selected areas along walking transects. Indicators are those listed in The Florida Wetland Delineation Manual, Gilbert, et.al., 1995.
- 7. Wildlife usage and natural history notes. Observations concerning the fauna and their life histories as reflected in footprints, scat, herbivory, nests, etc., in addition the calls of frogs, insects and birds will be identified whenever possible.
- Invasive exotics will be noted and appropriate staff selected by the mitigation sponsor will be contacted. The mitigation sponsor is responsible for the eradication of invasive exotics.
- Any notes on the general aspect of the site and how adaptive management techniques might be used toward restoration target/goals.

#### 3. Quantitative Plant Sampling

Groundcover monitoring. The quantitative sampling will be designed along a 50 meter transect that will be placed in each polygon of a particular plant assemblage to be sampled. These representative samples will measure the proportional distribution of groundcover; primarily herbaceous species but also shrub growth and tree saplings. Shrubs include woody plants of relatively low height, typically having several stems arising from the base. Each sample point will be located along the 50 m transect, every 10 meters. At each point, three, 1 mx1 m subplots or a 3mx1m plot will be measured and sampled. These permanent plots will be georeferenced. The plots will be distributed in a linear arrangement perpendicular to the 50 meter transect. Each transect will thus have fifteen separate, 1mx1m plots in which the cover, density, frequency and shrub (if any) height will be recorded.

#### Canopy monitoring:

Density of trees is determined using the methodology outlined below. Trees were defined and separated from the other vegetative categories as follows:

<u>Trees</u> in this sampling techniques include all woody plants with a main trunk greater than 10 cm (4 in) diameter at breast height (1.5 m) and have a stem at least 3 m tall. Basal areas of trees are determined from trunk circumference measured 1.5 m above the ground.

#### 1) Tenth Acre Plot Method

Three representative samples (circular plots) using this method are to be taken along the 50m transect. All trees are then measured within a full circle around each quadrat center to a radius of 37.2 ft (11.34m).

#### 4. Photography

The photographs will include as much view as is typical for a standard digital camera. All labeling of photographs in final reports will include the date of photo, photographer, location information.

#### 5. Reports and Record Keeping

Reports including all observations, raw and processed data, digital photographs will be compiled into a report. Annual monitoring will occur each fall. A copy of all records, in addition to those submitted, will be maintained at the offices of the Qualified Mitigation Specialist of record.

#### 6. Success

The restoration/mitigation project is expected to be successful in restoring the pre-existing plant communities or at least show a strong trend toward this effect on the site. Many of the species typically found in those communities mapped on the FLUCCS data should be target species or ecologically appropriate species.

The monitoring results will be compared with the baseline data and evaluated against the performance standards. If after three years the ground cover is not clearly trending toward the target condition, selected areas may be seeded or planted with ecologically appropriate native species that would be typical for the intended natural community type.

**B. Miscellaneous:** All culverts, internal fencing and rubbish, including silt fences (after graded areas are stabilized) will be removed from the site to an appropriate disposal area. The conservation area will be posted with the specific signs that comply with the conditions of the FDEP dredge and fill permit.

A monitoring report will be sent for each of the mitigation areas requiring monitoring. The agencies will receive one report for the on-site restoration, one for the DSBANK restoration, and one for the LPHCU restoration.

#### References:

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Hall, D. W. 1978. The Grasses of Florida. Dissertation. University of Florida, Gainesville, Florida.

Harper, R. M. 1914. Geography and vegetation of Northern Florida. Florida Geological Survey, 6<sup>th</sup> Annual Report, Tallahassee, Florida.

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Anglin, G. Nelson, J.R. Cooper, D. Bickner, K. Gilbert, N. Aymond, K. Greenwood and N. Raymond. 1998. Florida Wetland Plants: An Identification Manual. University of Florida, Institute of Food and Agricultural Sciences.

Wunderlin, R. 1998. Guide to the Vascular Florida of Florida. University of Florida Press, Gainesville, Florida.



# Florida Department of Environmental Protection

Northwest District Office 160 Governmental Center, Sulte 308 Pensacola, Florida 32502-5794 Charite Cred

All the because

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Mr. Ken Borick
The St. Joe Company
133 S. WaterSound Parkway,
WaterSound, Fl. 32413



JUN 21 2007

JACKSONVILLE DISTRICT

RE: Watersound North Phase I Wetland Modification; Individual Project Approval for St. Joe Ecosystem Management Agreement for Bay and Walton Counties, DEP File # 03-0221322-019-EA

Dear Mr. Borick:

The Department received your request to modify Department file # 66-0221322-001-EA, to construct a mixed use development known as WaterSound North with associated roads which will serve as Phase I (565.62 acres) of a larger development plan. This request for modification of a previously approved project supersedes the EMA wetland authorization of July 8, 2005. This authorization incorporates stormwater treatment facilities (previously approved in file #'s 03-0221322-001-EA and 03-0221322-015-EA) and wetland preservation and mitigation for approximately 565.62 acres within the boundaries of the Ecosystem Management Agreement (EMA) for Bay and Walton Counties. A master drainage plan for the approximate 1,000 acre site is also included. It incorporates wet detention ponds which will treat either one inch of volume over the basin served or 2.5 inches over the impervious area whichever is greater. Future phases will provide stormwater calculations and other supporting information providing compliance with appendix E of the Ecosystem Management Agreement with St. Joe. The specific project site is located northeast of U. S. Hwy. 98 and north and south of Side Camp Road in Section 23-26, Township 3 South, Range 18 West, Walton County.

Your application has been reviewed to determine whether it meets the terms of the EMA for both the wetland and stormwater components as outlined in the EMA. Based on the information submitted, the Department has determined that the project as designed will meet these terms. The submitted documents and specific conditions provide reasonable assurance to the Department that the referenced project will comply with the terms of the EMA. Specific details of the stormwater and the wetlands/mitigation components are:

Stormwater treatment: Wet Detention Ponds for Phase I and

a master drainage plan

Wetland Impacts: 22.05 acres of low quality

0.89 acres of high quality

WaterSound North Phase 1 Wetland Modification 03-221322-019-EA Page 2 of 2

Wetland mitigation: 147.98 acres preservation on site

11.72 acres preserved in Wildlife Corridor Conservation

Unit

106.10 acres restoration within Lake Powell Headwaters

Conservation Unit

1.57 credits from Devils Swamp Mitigation Bank

You (the applicant) are required to publish at your own expense the enclosed notice. The notice is required to be published one time within 30 days, in the legal ad section of a newspaper of general circulation in the area affected and shall be accomplished in the same manner as set forth in Section IX of the EMA and as provided in rule 62-110.106(3)(a) F.A.C. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to:

Mr. Larry O'Donnell Department of Environmental Protection 160 Governmental Center, Suite 201 Pensacola, Florida 32502

The proof of publication shall be provided to the above address within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time shall be grounds for denial of the individual project approval.

Thank you for submitting your application for review under the EMA agreement. If you have any questions regarding this project please contact Larry O'Donnell at (850) 595-8300, Ext. 1129.

Sincerely.

Barbara F. Ruth

Environmental Administrator

Submerged Lands & Environmental

Resources Program

Cc: USACOE-Teresa Zar

**Bay County** 

Thomas Estes, St. Joe Brian Underwood, St. Joe

Amy Douglas, ERC,

# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF INTENT TO APPROVE INDIVIDUAL PROJECT WITHIN ECOSYSTEM MANAGEMENT AREA

The Department of Environmental Protection gives notice of its intent to approve an individual project of The St. Joe Company, 245 Riverside Avenue, Suite 500, Jacksonville, Florida 32202, File Number 03-0221322-019-EA, within the Ecosystem Management Area established through the binding St. Joe Ecosystem Management Agreement for Bay and Walton Counties (EMA) entered into by The St. Joe Company and the Department on October 11, 2004, under the authority of Section 403.0752, F.S., for certain regulatory approvals for dredge and fill and stormwater activities within a 31,369 acre tract of land in Bay and Walton Counties.

The individual project approval is for a site known as WaterSound North Phase I.

The specific project site is located northeast of U. S. Hwy. 98 and north and south of Side

Camp Road in Section 23-26, Township 3 South, Range 18 West, Walton County.

WaterSound North is a mixed use development with associated roads which will serve as Phase I (562.62 acres) of a larger development plan. This request for modification of a previously approved project supersedes the EMA wetland authorization of July 8, 2005. This authorization incorporates stormwater treatment facilities and wetland preservation and mitigation for approximately 565.62 acres within the boundaries of the Ecosystem Management Agreement (EMA) for Bay and Walton Counties. The Department has determined that the applicant has provided reasonable assurance that the project complies with the terms of the EMA.

The application for this individual project approval, as well as the binding Ecosystem Management Agreement for Bay and Walton Counties, is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Department's Northwest District offices, 160 Government Center, Pensacola, Florida 32501-5794 and at the Department's Northwest District Branch Office, 2353 Jenks Avenue, Panama City, Florida, 32405.

The Department's proposed agency action shall become final unless a timely petition for administrative hearing is filed under sections 120.569 and 120.57 of the Florida Statutes before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

Mediation is not available.

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. Any challenge to the proposed agency action on the individual project shall be limited to whether or not the individual project complies with the terms of the EMA. The petition must contain the information set forth below and must be filed (received by the clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Under rule 62-110.106(4) of the Florida Administrative Code, a person whose substantial interests are affected by the Department's proposed action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 390

Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, before the applicable deadline. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

If a timely and sufficient petition for administrative hearing is filed, other persons whose substantial interest will be affected by the outcome of the administrative process have the right to petition to intervene in the proceeding. Intervention will be permitted only at the discretion of the presiding officer upon the filing of a motion in compliance with rule 28-106.205 of the Florida Administrative Code.

In accordance with rule 28-106.111(2) and 62-110.106(3)(a), F.A.C., petitions for an administrative hearing by the applicant must be filed within 14 days of this notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under section 120.60(3) of the Florida Statutes, must be filed within 14 days of publication of this notice. Under section 120.60(3) of the Florida Statutes, however, any person who has asked the Department for notice of agency action may file a petition within 14 days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition for an administrative hearing within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of the Florida Statutes.